QC

Quality Control

Memo

Work Order ID 98876 *98876* Page 1 March-27-13 1:00:24 PM D3907-1 Item ID: Accept *N900040100* Setup Start **Revision ID:** Item Name: Bushing **Start Date:** 3/27/13 **Start Qty: 40.00** *40* **Cust Item ID:** Required Date: 4/03/13 Req'd Qty: 40.00 *40* **Customer:** Reference: Run Start Process Plan: Date: 13 03-77 Tooling: Approvals: Date: Stop QC: Date: SPC (Y/N): Date: Sequence ID/ Operation Set Up/ Tool ID Reject Tool # Plan Accept Reject Work Center ID Description **Run Hours** Code Qty Number **Qty** Stamp Draw Nbr **Revision Nbr** D3907 Α 100 0.00 40 *100* Hardinge 0.00 Memo Hardinge CNC Lathe Small Machine as per Folio FA823 13-3-31 & Dwg D3907 Dwg Rev: folio Rev: Deburr 110 QC2- Inspect parts off machine FAI/FAIB 0.00 5) 31-3-13 40 Ø *110*

	v									DQA:	Date:	
NCR: Ye	es / No				WORK ORDER NON-C	ONI	FORN		QA Closed:	Date:		
Work Order Part No	0				DISPOSITION Rework Scrap Use-as-is Work Order Update		Skid-tube Crosstube Machining Small Fab Thermoforming Finishing Large Fab Composite				/PROCESS Water Jet d. Eng. Coor. re/Packaging Supplier	Engineering Quality Other
Root				Descri	ption of work order update		itial		tion	Sign &		
Cause	Date	Step	Qty	(or Non-conformance	Chie	f Eng	Desci	ription	Date	Verification	QC Inspector
Doc/Data												
Equip/Tooling		1										
Operator				1								
Material					· ·				-			
Setup												•
Other											,	
Process												

FAULT CATEGORY

Grain

Hardware

Maintenance

Out of Calibration

Out of Sequence

Outside Dimensions

Mislabeled

Misread

Offset

Inspection Incomplete

Instructions Incomplete/Unclear

Pressure/Forced

Weld

Other

Temperature/Cure

Wrong Stock Pulled

Ovalized

Part Incorrect

Part Moved
Positioned Wrong

Part Lost/Missing

Power Loss/Surge

Over/Under tolerance

General

Bend

Burrs

BOM/Route

Contamination

Countersink

Cut Too Short

Drill Holes

Drawing

Finish Folio

Broken/Damaged

H:/FORMS/Quality Assurance\approved QA/NCRWO Rev G

Ripples in Bend

Turning Sequence

Wave/Twist in Tube

Supplier Training Unapproved

Landing Gear

Bending

Cracks

Cuffs

Heat Treat

Crushed/Crimped

Inspection Strip in Tube

Torque Waves in Extrusion

Centre Not Concentric to O/S

March-27-13 1:00:24 PM Item ID: D3907-1 Accept *N900040100* Setup Start **Revision ID:** Item Name: Bushing ***4**0* Start Date: 3/27/13 **Start Otv: 40.00 Cust Item ID:** Required Date: 4/03/13 Reg'd Oty: 40.00 *40* **Customer:** Reference: Run Process Plan: Date: Approvals: Tooling: Date: Stop QC: Date: SPC (Y/N): Date: Sequence ID/ Operation Set Up/ Tool ID Tool # Plan Reject Accept Reject Insp. Work Center ID **Description Run Hours** Code Qty **Qty** Number Stamp 120 QC8- Inspect parts - second check 0.00 OAS 13/04/01 *120* 0.00 Memo Quality Control Identify as per dwg & Stock Location: WA 4 130 CpC13.4.2 40 9 ____ *130* Packaging 0.00 Memo *****STOCK IN BASKET CELL***** Packaging 140 QC21- Final Inspection - Work Order Release 0.00 *140* 0.00 Memo Quality Control

N13-043

		DQA:	Date:	
NCR: Yes / No	WORK ORDER NON-CONFORMANCE / UPDATE		_	
		04 014.	Daka.	

									QA Closed:	Dat	e:
Work Orde	er.				DISPOSITION			AGAINST DE	PARTMENT	/PROCESS	
Part N	No				Rework Scrap Use-as-is Work Order Update	The	Skid-tube Machining moforming Large Fab	Water Jet d. Eng. Coor. re/Packaging Supplier	Engineering Quality Other		
Root		Ī		Descr	iption of work order update	Initial	A	ction	Sign &		
Cause	Date	Step	Qty		or Non-conformance	Chief En	g Des	cription	Date	Verification	QC Inspector
Doc/Data Equip/Tooling Operator Material Setup Other Process Supplier Training Unapproved								•			
Unapproved	<u> </u>	<u>l</u>	1			AULT CAT	 EGORY		<u> </u>		<u></u>
Landir	ng Gear				General						
`	Bending Centre Not Concentric to O/S Cracks Crushed/Crimped Cuffs Heat Treat Inspection Strip in Tube Ripples in Bend Torque Waves in Extrusion				Bend BOM/Route Broken/Damaged Burrs Contamination Countersink Cut Too Short Drill Holes Drawing	Instru Main Mislal Misre Offsei	vare ction Incomplete ctions Incomplete tenance peled ad	/Unclear	Ovalized Over/Under Part Incorre Part Lost/M Part Moved Positioned V Power Loss/	ct issing Vrong	Pressure/Forced Temperature/Cure Weld Wrong Stock Pulled Other
	Turning Sequence Finish					Out o	f Sequence				
	□ Wave/Tv	vist in Tul	he		Folio	Outsid	le Dimensions				

Picklist Print

March-27-13 1:00:29 PM

Work Order ID: 98876

Parent Item: D3907-1

Parent Item Name: Bushing

98876

D3907-1

Start Date: 3/27/13

Required Date: 4/03/13

Page 1

Start Qty: 40.00

Required Qty: 40.00

Comments:

Component Item ID/ Item Name	Replacement Item ID	Mfg/ Purch	Bin Item	Primary Location	Last Location	Route Seq ID	Unit of Measure	Qty on Hand	Qty per Kit	Total Qty	Qty Issued	Date Issued	Status	
M304R0.375		Purchased	No			100	f	64.7360	0.03	1.2				•
M304R0 304 ROUND BAR 0.375	375								**	27		<u> </u>	12-	

Location Loc Qty Loc Code MAT029 64.736 119346 2.328 120204 5.442 121380 3.846 123294

53.12

												DQA:	Da	ite:	
NCR:	Yes	/ No				WORK ORDER NON-O	100	NFORM	MANCE / UP	DATE					
												QA Closed:	Da	te:	
Work Orde	er:					DISPOSITION			•	AGAINST	DE	PARTMENT	/PROCESS		
,	-					Rework]	Skid-tube Crosstube			-	Water Jet			Engineering
Part N	۷o. ِ					Scrap				Small Fab	_	4	d. Eng. Coor.	_	Quality
NCR No.						├ ─┤ │			Finishing Composite	-	Rec/Stoi	e/Packaging Supplier	-	Other	
Root			<u> </u>		Descri	tion of work order update	<u>_</u> 	nitial	Ac	tion		Sign &			
Cause		Date	Step	Qty		or Non-conformance		ief Eng		ription		Date	Verificatio	n	QC Inspector
Doc/Data						······································									
Equip/Tooling															
Operator															
Material															
Setup			1												
Other													JI		
Process															
Supplier	П	I													,
Training	П														
Unapproved															
						F.	AUL	T CATE	GORY						
Landi	ng G	ear				General									
		Bending				Bend		Grain				Ovalized			Pressure/Forced
	Centre Not Concentric to O/S					BOM/Route Hardware						Over/Under	tolerance		Temperature/Cure

Inspection Incomplete

Maintenance

Out of Calibration

Out of Sequence

Outside Dimensions

Mislabeled

Misread

Offset

Instructions Incomplete/Unclear

Part Incorrect

Part Moved

Part Lost/Missing

Positioned Wrong

Power Loss/Surge

Weld

Other

Wrong Stock Pulled

Broken/Damaged

Contamination

Countersink

Cut Too Short

Drill Holes

Drawing

Finish Folio

Burrs

H:/FORMS/Quality Assurance\approved QA/NCRWO Rev G

Ripples in Bend

Turning Sequence

Wave/Twist in Tube

Cracks

Cuffs

Heat Treat

Crushed/Crimped

Inspection Strip in Tube

Torque Waves in Extrusion

DART AEROSPACE LTD	Work Order:	98876
Description: Bushing	Part Number:	D3907-1
Inspection Dwg: D3907 Rev: A		Page 1 of 1

FIRST ARTICLE INSPECTION CHECKLIST

Titto / Actual Latinot Collection													
Drawing Dimension	Tolerance	Actual Dimension	Accept	Reject	Method of Inspection	Comments							
Ø0.375	+/-0.010	312			Z XC	Ue/2							
0.25	+/-0.030	,248)							
0.059	+/-0.010	-057											
Ø0.257	+0.006/-0.001	.257											
-													
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		,											
3221													
	\		DAO										

	DA	
Measured by:	Audited by: 14	Preliminary Approval:
Date: 31-03-13	Date: 13 /04/01	Date:

Rev	Date	Change	Revised by	Approved
Α	09.05.20	New Issue	KJ	
В	10.06.07	Tolerance for dimension Ø0.375 revised	KJ de	77
			(7)	

									DQA:	Date:	
NCR: Yes	/ No				WORK ORDER NON-C	ONFOR	MANCE / UP	DATE	QA Closed:	Date:	
Work Order:					DISPOSITION	AGAINST DE	T DEPARTMENT/PROCESS				
					Rework		Skid-tube	Crosstube		Water Jet	Engineering
Part No.								Small Fab	4	d. Eng. Coor. re/Packaging	Quality Other
NCR No.			<u></u>		Use-as-is Work Order Update	Finishing Composite	Rec/Sto	Supplier	Other		
Root				Descri	ption of work order update	Initial	Ac	tion	Sign &		
Cause	Date	Step	Qty	(or Non-conformance	Chief Eng	Desc	ription	Date	Verification	QC Inspector
Doc/Data											
Equip/Tooling											
Operator											
Material											
Setup									!		
Other			ļ								
Process					;				·		
Supplier									1		

Landing	Gear	General	_		·		-
	Bending	Bend	Grain	Ĺ	Ovalized	L	Pressure/Forced
	Centre Not Concentric to O/S	BOM/Route	Hardware		Over/Under tolerance		Temperature/Cure
	Cracks	Broken/Damaged	Inspection Incomplete		Part Incorrect	L	Weld
Γ	Crushed/Crimped	Burrs	Instructions Incomplete/Unclear		Part Lost/Missing		Wrong Stock Pulled
	Cuffs	Contamination	Maintenance		Part Moved		
	Heat Treat	Countersink	Mislabeled		Positioned Wrong		-
	Inspection Strip in Tube	Cut Too Short	Misread	L	Power Loss/Surge		Other
	Ripples in Bend	Drill Holes	Offset				
	Torque Waves in Extrusion	Drawing	Out of Calibration				
	Turning Sequence	Finish	Out of Sequence				
	Wave/Twist in Tube	Folio	Outside Dimensions				• .

FAULT CATEGORY

Training Unapproved

111 D D vC) OCOPY TRADELY: OBE 98876 MLJ 13-03-27 0.059 - Ø0.375 REF Ø0.257 D3907-1 BUSHING **SECTION A-A**C5-1 В 1) MATERIAL: AISI 304/316 STAINLESS STEEL ROD REF DART SPEC M304R A NEW ISSUE AJS 09,03.11 REV. DESCRIPTION DATE BY OR: AISI 304/316 STAINLESS STEEL BAR REF DART SPEC M304B

3) TOLERANCES: PER DART QSI 018 UNLESS OTHERWISE NOTED 4) UNITS: INCHES UNLESS OTHERWISE NOTED 5) BREAK SHARP EDGES: 0.005 TO 0.010 MAX

6) IDENTIFICATION: N/A

7) WEIGHT: N/A

2) FINISH: NONE

DESIGN **DART AEROSPACE LTD** DRAWN HAWKESBURY, ONTARIO, CANADA CHECKED DRAWING NO. REV. A MFG. APPR. D3907 SHEET 1 OF 1 APPROVED TITLE DE APPR. BUSHING (BASKET REPAIR) COPYRIGHT © 2009 BY DART AEROSPACE LTD

THIS DOCUMENT A THUMBS AND CONTRACTION HOMES CONTRACT OF THE POPERS OF CONTRACTION HOMES CONTRACT OF THE POPERS OF T DATE 09.03.11

С

NCR:	⁄es	/ No				WORK ORDER NON-O	100	NFORM	MANCE / UP	DATE			•	
											QA Closed:	Da	te:	
Work Orde	sř.					DISPOSITION				AGAINST DE	PARTMENT	/PROCESS		
Part N	- ۱۰۰					Scrap Machining Superior Machini			Crosstube Small Fab Finishing Composite	Fab Prod. Eng. Coor. Quality Othe				
Root	Ī				Descri	ption of work order update		nitial	Ac	tion	Sign &			
Cause		Date	Step	Qty	(or Non-conformance	Ch	ief Eng	Desc	ription	Date	Verificatio	n ·	QC Inspector
Doc/Data													ì	
Equip/Tooling														
Operator														
Material														
Setup													ı	
Other				ļ									ł	
Process							1							
Supplier	Ш													
Training														
Unapproved														
						F	AUL	T CATE	GORY					
Landi	ng G	iear				General	_	,			a		_	
	-	Bending				Bend	-	Grain			Ovalized		-	Pressure/Forced
	$\overline{}$	Centre No	ot Concer	ntric to	o/s	BOM/Route		Hardwa			Over/Under		-	Temperature/Cure
	${f}$	Cracks				Broken/Damaged		i i	on Incomplete	<u> </u>	Part Incorred		ш	Weld
	_	Crushed/0	Crimped			Burrs	L	1	ions Incomplete/	Unclear	Part Lost/Mi	ssing	Ш	Wrong Stock Pulled
	Cuffs Contaminat					Contamination		Mainte			Part Moved			
						Countersink	Mislabeled Positioned Wrong							
	-	Inspection		Tube		Cut Too Short		Misread	I	L_	Power Loss/	Surge		Other
	Ripples in Bend Drill Holes					Offset								
	Torque Waves in Extrusion				n	Drawing	Out of Calibration							

Out of Sequence

Outside Dimensions

DQA:

Date:

H:/FORMS/Quality Assurance\approved QA/NCRWO Rev G

Turning Sequence

Wave/Twist in Tube

Finish

Folio